METHOD AND APPARATUS FOR COMPENSATING OUTPUT VOLTAGE FLUCTUATIONS OF TURBINE/ALTERNATOR ON COMMON SHAFT

ABSTRACT OF THE DISCLOSURE

An electrical system and method for a turbine/alternator comprising a gas driven turbine and a permanent magnet alternator rotating on a common shaft includes an inverter circuit connectable either to an output circuit or the stator winding of the alternator. A control circuit during a start-up mode switches the inverter circuit to the stator winding of the alternator and during a power out mode switches the inverter circuit to the output circuit. During the power out mode, output voltage is continuously measured and the inverter circuit is controlled to compensate for output voltage fluctuations.